



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D206-667-247TRN
Job Sheet 168213-E



Part No: D206-667-247TRN

Job Qty: 1 ea

Part Name: Crosstube Assembly, Mid Aft



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/13/17

Job Tracking No:

Due Date: 11/30/17

Created By: Mario Poulin

Type: Stock

Description:

Ship Via:

DAS 10 9-89 206-667-247 REV A

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		11/29/17	0.00	0.00	Start Up Crosstubes		<i>PMP</i>
100	Mori Seiki	1 pcs		11/29/17	3.85	1.33	Mori Seiki TL-40		<i>PMP</i>
110	QC	1 pcs		11/29/17	0.00	0.00	QC2		<i>PMP</i>
120	Mori Seiki	1 pcs		11/29/17	0.00	1.33	Mori Seiki TL-40		<i>PMP</i>
130	QC	1 pcs		11/29/17	0.00	0.00	QC2		<i>DASLP</i>
140	QC	1 pcs		11/29/17	0.00	0.00	QC8		<i>47</i>
145	Crosstubes	1 pcs		11/29/17	0.00	0.37	Crosstube		<i>9-89 GP</i>
150	HandFXtube	1 pcs		11/30/17	0.00	0.32	Crosstube		<i>BEB 18-05-09</i>
160	QC	1 pcs		11/30/17	0.00	0.00	QC7		<i>GP 18-06-12</i>
170	Packaging	1 pcs		11/30/17	0.00	0.00	Packaging3		<i>GP 18-06-12</i>
180	QC21-SA	1 Ea		11/30/17	0.00	0.00	QC21		<i>3-00 JUN 17 2018</i>

Part Op 100 - 1-Fill tube with sand & install plugs 206-207 on both ends as per Folio FB030 2-Turn first side as per Folio FB030
Descriptions: 3-Blend transition line with belt sander 60 grit.

120 - 1-Turn second side as per Folio FB030 2-File down transition lines smooth.

145 - GRIND ONLY TRANSITION LINES SMOOTH LONGITUDE WAY.

150 - 1- handfinish X-TUBE INSIDE AND OUT

170 - LOCATION : LG014

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D6004-115	1	46	0	0

B116 116

Part Specifications

Specifications could not be found.

Plex 11/13/17 12:39 PM dart.poulin.mario

DART
AEROSPACE
S012422

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Crosstube Assembly, Mid Aft

PART NO: D206 – 667 – 247TRN

Revision:

Operation: Start up Operation

Change No:

Mfg Date: 11/22/17

Job No: 168213 – E

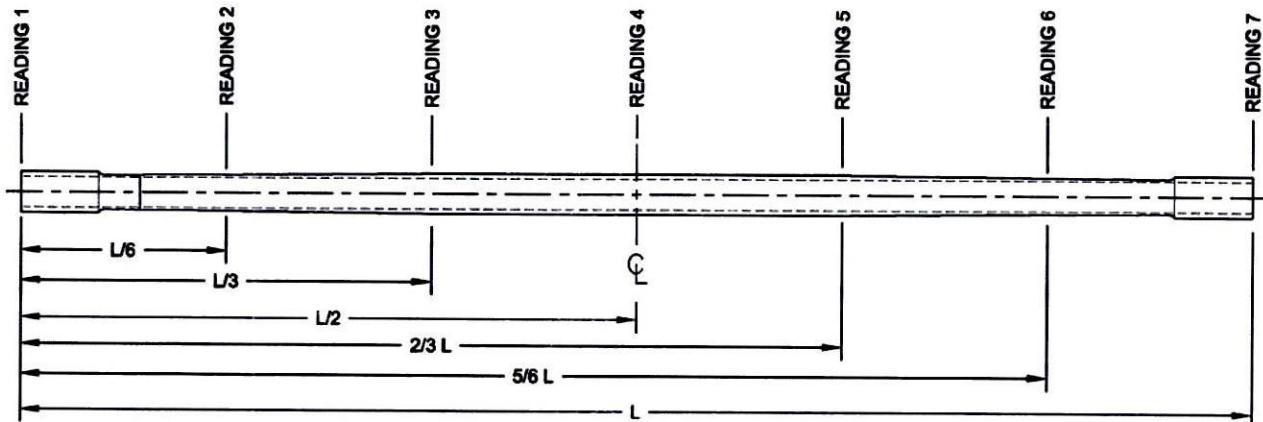
DART AEROSPACE LTD	Work Order:	168213-E
Description: Crosstube Assembly, Mid Aft	Part Number:	D206-667-247
Inspection Dwg: D206-667-247 Rev: A		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

	Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.490	+0.005/-0.000	2.4945	✓		VERN 08	
	2.025	+0.005/-0.000	2.029	✓			
	2.079	+0.005/-0.000	2.084	✓			
	2.145	+0.005/-0.000	2.150	✓			
	2.209	+0.005/-0.000	2.014	✓			
	2.287	+0.005/-0.000	2.291	✓			
	2.363	+0.005/-0.000	2.367	✓			
	0.200	+/-0.010	.2005	✓		VERN 08	
	R0.063	+/-0.010	.063	✓		RG	
	R2.00	+/-0.010	2.0	✓		RG	
	R0.063	+/-0.010	.063	✓		RG	
	4.438	+/-0.010	4.443	✓		VERN 08	
SIDE B	2.490	+0.005/-0.000	2.493	✓		VERN 08	
	2.025	+0.005/-0.000	2.0275	✓			
	2.079	+0.005/-0.000	2.083	✓			
	2.145	+0.005/-0.000	2.149	✓			
	2.209	+0.005/-0.000	2.213	✓			
	2.287	+0.005/-0.000	2.290	✓			
	2.363	+0.005/-0.000	2.366	✓			
	0.200	+/-0.010	.200	✓		VERN 08	
	R0.063	+/-0.010	.063	✓		RG	
	R2.00	+/-0.010	2.0	✓		RG	
	R0.063	+/-0.010	.063	✓		RG	
	4.438	+/-0.010	4.437	✓		VERN 08	
	99.76	+/-0.020	99.76	✓		TAPE	

DART AEROSPACE LTD	Work Order:	
Description: Crosstube Assembly, Mid Aft	Part Number:	D206-667-247
Inspection Dwg: D206-667-247 Rev: A		Page 2 of 2

WALL THICKNESS MEASUREMENT



Location	WALL THICKNESS MEASUREMENT (IN)				Deviation Δw (max-min)	TOLERANCE
	w1	w2	w3	w4		
READING 1 L= 0"	388	368	332	349	.056	0.045"
READING 2 L= 16.63	271	210	173	198	.058	
READING 3 L= 33.25	373	348	309	335	.064	
READING 4 L= 49.88	389	368	337	359	.052	
READING 5 L= 66.506	371	350	320	339	.051	
READING 6 L= 83.133	224	200	183	201	.041	
READING 7 L= 99.76	387	359	338	357	.043	

Dwg Δ
0.345 0.013
0.186 0.013

Calibration Result

Actual Block Thickness: 200-400

Sitiescan 250 Measured Thickness: 200-400

Measured by: <i>gmp</i>	Audited by: DAS 47 9-89	Preliminary Approval:
Date: 2017-11-15	Date: 17-12-28	Date:

Rev	Date	Change	Revised by	Approved
A	11.06.21	New Issue	KJ	
B	12.02.02	Dimension 4.438 was 4.500	KJ	
C	12.06.01	Wall thickness form added	KJ	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>168213-E</u> Part No. <u>D206667-247TRN</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☒</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☒	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☒	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : <u>18/3/2</u>		Step #: <u>160</u>		QTY Effective : _____		MRB (QSI042) Approval DAS 12 9-89 <u>18/3/2</u>																			
Description Work Order Deviation				Disposition																					
Well thickness measurement is outside tolerance. Min well is 0.013 below dug nominal.				Acceptable. Min well is within tolerance of new material																					
				Completed By DAS 12 9-89 <u>18/3/2</u>																					
				Lead hand / Supervisor Approval Verification <u>[Signature]</u> <u>18-03-13</u>																					
				QC / QA Coordinator Approval																					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						